

Taxonomic notes in *Hypochaeris* L. (Asteraceae)

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Abstract

During the works for the treatment of the genus *Hypochaeris* in the Rio Grande do Sul State we verify that *H. rosengurtii* CABR. cannot be separated from *H. lutea* (VELL.) BRITTON. *H. rosengurtii* var. *pinnatifida* (SPEG.) CABR. and *H. microcephala* var. *albiflora* (OK.) CABR. are elevated to the category of species. Comments about the species are presented.

Kew words: *Hypochaeris*, Asteraceae, taxonomy. Brazil

Resumo

Durante os trabalhos para o tratamento do gênero *Hypochaeris* no Rio Grande do Sul, verificou-se que *H. rosengurtii* CABR. não ser pode separada de *H. lutea* (VELL.) BRITTON. *H. rosengurtii* var. *pinnatifida* (SPEG.) CABR. e *H. microcephala* var. *albiflora* (OK.) CABR. são elevados a categoria de espécie. Comentários sobre as espécies são apresentados.

Palavras chave: *Hypochaeris*, Asteraceae, taxonomia.

Introduction

The genus *Hypochaeris* L. comprises between 50 and 100 species (STEBBINS 1971, TOMB 1978, BREMER 1994). Its two principal areas of geographic distribution are the Mediterranean Region and South America (CABRERA 1963, CERBAH et al. 1998). Actually, this genus has 12 species referred to Brazil, but only 10 were found during the revision of the taxonomy of the genus in Rio Grande do Sul, the southernmost Brazilian State. The northern limit for Brazilian native species of *Hypochaeris* is the Minas Gerais State, in the Southeast region.

The genus is identified by the constancy of some characters, as the presence of paleae on the receptacle, all florets ligulate with 5-lobed apex, and plumose pappus (CABRERA

1976). In *Hypochoeris*, characters with taxonomic value in the species classification are the capitula size, stem ramification, ligule length, and presence or absence of beaks in the fruits (CABRERA 1976). This author considers that other characters, as leaf shape and pubescence, stem and involucre bract measurements, and plant size, has no or little taxonomic value.

During the taxonomic study of the genus *Hypochoeris* from the Rio Grande do Sul State, we analysed many collections of the herbaria from this State, as well as from other Brazilian herbaria. Photos and photocopies of type specimens were studied. With these analyses and observations, we can verify that *Hypochoeris rosenfurtii* CABR. cannot be separated from *H. lutea* (VELL.) BRITTON. On the other hand *H. rosenfurtii* var. *pinnatifida* (SPEG.) CABR. has diagnostic characters that permit the elevation of this taxon to the species rank. Similarly, *H. microcephala* var. *albiflora* (OK.) CABR. is also elevated to the species category.

1. *Hypochoeris lutea* (VELL.) BRITTON, Ann. New York Acad. Sci. 7:153. 1894.

Basionym: *Prenanthes lutea* VELLOZO, Flora Fluminensis: 350. 1825. Icones, 8: tab. 91. 1827 (1835). Typus: VELLOZO, Flora Fluminensis, Icones 8, tab. 91. 1827 (1835) (lectotype, designated here).

Synonym: *Achyrophorus trichocephalus* SCH. BIP., Pollichia 16–17: 57. 1859. *H. lutea* var. *trichocephala* (SCH. BIP.) CABR., Bol. Soc. Arg. Bot. 10: 182. 1963. Typus: Brazil, Santa Catarina, D'URVILLE 102^a, 1859 (P holotype, non vidi).

H. rosenfurtii CABR. var. *rosenfurtii*. Flora de la Provincia de Buenos Aires, parte VI, Compuestas: 150–153. 1963. Typus: Uruguay, Dept. Florida, Cerro Colorado, Estancia Santa Elvira, B. ROSENURTT 262, XII. 1936 (LP holotype; photocopy!), syn. nov.

CABRERA (1963a, b) refers to *H. lutea* as a Brazilian endemic species. The same author (CABRERA 1941) described *H. rosenfurtii* as a different species from Uruguay and Brazil. Our observations of specimens and type photos revealed that the differences between them (such as the presence of hairs in the first taxon cited, as well as the size of the stem leaves, and the capitula size) are inconsistent. Accordingly, we here propose that *H. rosenfurtii* var. *rosenfurtii* and *H. lutea* var. *trichocephala* are synonyms of *H. lutea*.

2. *Hypochoeris pinnatifida* (SPEG.) C. F. AZEVEDO-GONÇALVES & N. I. MATZENBACHER, comb.nov.

Basionym: *H. variegata* (LAM.) BAKER var. *pinnatifida* SPEGAZZINI, Contrib. Flora Sierra Ventana: 40. 1896. Type: Sierra de la Ventana, Nov. 1895, C. SPEGAZZINI (LP holotype, non vidi).

Synonyms: *H. rosenfurtii* CABR. var. *pinnatifida* (SPEG.) CABR., Rev. Mus. La Plata Sec. Bot. n. s. 4: 393. 1941.

Hypochaeris variegata (LAM.) BAKER var. *acutibracteata* SPEGAZZINI, Contrib. Flora Sierra Ventana: 39, 1896. Type: Sierra de la Ventana, Nov. 1895, C. SPEGAZZINI (LP holotype, non vidi).

In florets and cypselas *H. pinnatifida* is similar to *H. lutea*, and it is difficult to separate the two species on such characters. However, there are some good diagnostic characters: the involucre of *H. pinnatifida* is campanulate, while the involucre of *H. lutea* is campanulate to cylindrical-campanulate; the ligules of the first species are pale yellow, but dark yellow in the second. *H. lutea* presents a stem with more branches (up to 34) than *H. pinnatifida* (up to 7). The involucre bracts of *H. pinnatifida* are disposed in four to five series and are darkened from the apex to their middle. *H. lutea* has two to three series of imbricate involucre bracts with darkness along their whole extension. In vegetative aspects these species differ by the presence of pinnatifid leaves in *H. pinnatifida*, while the leaves of *H. lutea* are entire and linear-lanceolate, although some individuals of *H. lutea* have leaves with shortly toothed margins. Finally, *H. pinnatifida* attains 14 to 36 cm in height, while *H. lutea* is usually taller, 22 to 77 cm. Because of these differences, we elevate *H. pinnatifida* to species rank.

3. *Hypochaeris albiflora* (OK.) C. F. AZEVÊDO-GONÇALVES & N. I. MATZENBACHER, comb. nov.

Basionym: *H. brasiliensis* GRISEB. var. *albiflora* O. KUNTZE, Rev. Gen. Plant. III (2): 159. 1898. Type: Santa Fé, Ceres, OTTO KUNTZE, without date (F holotype; photo!).

Synonym: *H. microcephala* (SCH. BIP.) CABR. var. *albiflora* (OK.) CABR., Notas Mus. La Plata II: 201. 1937.

During the fieldwork we concluded that *H. microcephala* var. *microcephala* is in reality a hybrid between *H. chillensis* (H.B.K.) Hieron. and *H. albiflora*. This result is reported in a separate paper and is the motive for the elevation of var. *albiflora* to the species rank. *H. albiflora* was originally described as a variety of *H. brasiliensis* (LESS.) GRISEB. (= *H. chillensis* (H.B.K.) Hieron.) and later transferred by CABRERA (1937) to *H. microcephala*. The species *H. albiflora* exhibits great morphological variability, being easily confused with *H. chillensis* when exsiccated. This confusion is especially common when the collector does not refer to the flower color. In field observations the main difference between *H. albiflora* and *H. chillensis* is the white flowers of the former species. It is also distinct by the cylindrical or cylindrical-campanulate involucre (*H. chillensis* has a campanulate involucre), and by the branching system of its stem.

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